

Sub F1
(a) a G1 protein isoform whose sequence is that of SEQ ID NO:2 or 4;

(b) a fragment of (a) which is capable of binding to one or more of MORT-1, Mch4 and MACH;

(c) an analog of (a) which differs from the sequence of (a) by no more than ten substitutions, deletions and/or insertions of amino acid residues and is capable of binding to one or more of MORT-1, Mch4 and MACH; or

CONT.
(d) a derivative of (a), (b) or (c) by modification of the side groups of one or more amino acid residues thereof without changing one amino acid to another of the twenty commonly occurring natural amino acids, which derivative is capable of binding to one or more of MORT-1, Mch4 and MACH.

45 (New). A molecule in accordance with claim 44, wherein said G1 protein isoform of (a) is that of SEQ ID NO:2

Sub I1
46 (New). A molecule in accordance with claim 45, wherein the DNA sequence encoding said G1 protein isoform of (a) is SEQ ID NO:1.

47 (New). A molecule in accordance with claim 44, wherein said G1 protein isoform of (a) is that of SEQ ID NO:4

48 (New). A molecule in accordance with claim 47, wherein the DNA sequence encoding said G1 protein isoform of (a) is SEQ ID NO:3.

Sub H1
49 (New). A vector comprising a molecule in accordance with claim 44.

50 (New). A vector in accordance with claim 49 capable of being expressed in a eukaryotic host cell.

Sub I1
51 (New). A vector in accordance with claim 49 capable of being expressed in a prokaryotic host cell.

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H2

52 (New). Transformed host cells containing a vector in accordance with claim 49.

53 (New). A method for producing a polypeptide which is capable of binding to one or more of MORT-1, Mch4 and MACH and affects the intracellular signaling process initiated by the binding of FAS ligand to FAS-R or the binding of TNF to p55-R, comprising:

growing transformed host cells in accordance with claim 52 under conditions suitable for the expression of an expression product;

effecting post-translational modifications of said expression product as necessary for obtaining said polypeptide; and

isolating said polypeptide.

54 (New). A polypeptide which is capable of binding to one or more of MORT-1, Mch4 and MACH and affects the intracellular signaling process initiated by the binding of FAS ligand to FAS-R or the binding of TNF to p55-R, which polypeptide has the amino acid sequence of:

(a) a G1 protein isoform whose sequence is that of SEQ ID NO:2 or 4;

(b) a fragment of (a) which is capable of binding to one or more of MORT-1, Mch4 and MACH;

(c) an analog of (a) which differs from the sequence of (a) by no more than ten substitutions, deletions and/or insertions of amino acid residues and is capable of binding to one or more of MORT-1, Mch4 and MACH; or

(d) a derivative of (a), (b) or (c) by modification of the side groups of one or more amino acid residues thereof

Sub F2
without changing one amino acid to another of the twenty commonly occurring natural amino acids, which derivative is capable of binding to one or more of MORT-1, Mch4 and MACH.

Sub I1
55 (New). A polypeptide in accordance with claim 54, wherein said sequence of (a) is SEQ ID NO:2.

56 (New). A polypeptide in accordance with claim 54, wherein said sequence of (a) is SEQ ID NO:4.

Sub F3
57 (New). A polypeptide in accordance with claim 54, which has the amino acid sequence of SEQ ID NO:2 or an analog thereof which differs from SEQ ID NO:2 by the substitution of a single amino acid residue, which analog is capable of binding to one or more of MORT-1, Mch4 and MACH.

Sub I1
58 (New). A polypeptide in accordance with claim 54, which has the amino acid sequence of SEQ ID NO:4.

Sub H3
59 (New). A pharmaceutical composition for the modulation of the FAS-R ligand- or TNF-effect on cells comprising, as active ingredient, a polypeptide according to claim 54.

Sub F4
60 (New). A method for the modulation of cell death or inflammatory processes, comprising treating said cells by introducing into said cells one or more of said polypeptide in accordance with claim 54 in a form for intracellular introduction thereof, or introducing into said cells a DNA sequence encoding said one or more said polypeptide in the form of a vector carrying said sequence, said vector being capable of effecting the insertion of said sequence into said cells in a way that said sequence is expressed in said cells.

61 (New). A method for the modulation of the FAS-R or TNF ligand effect on cells carrying a FAS-R or p55-R,

Sub
F4

comprising treating said cells with one or more polypeptides according to claim 54 capable of binding to MORT-1 or a MORT-1-binding protein, wherein said treating of said cells comprises introducing into said cells said one or more polypeptides in a form suitable for intracellular introduction thereof, or introducing into said cells a DNA sequence encoding said one or more polypeptides in the form of a suitable vector carrying said sequence, said vector being capable of effecting the insertion of said sequence into said cells in a way that said sequence is expressed in said cells.

62 (New). A method according to claim 60, wherein said treating of cells comprises introducing into said cells a DNA sequence encoding said polypeptide in the form of a suitable vector carrying said sequence, said vector being capable of effecting the insertion of said sequence into said cells in a way that said sequence is expressed in said cells.